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ABSTRACT

In conjunction with the National Science Foundation (NSD), an on-going experiment is being conducted to test the feasibility of increasing public access to 16 major data bases by providing public libraries with on-line, interactive, retrieval capacity. During the period from January to March 1976, the major activities of the study were: (1) a continued monitoring of the number of searches, an index which showed an increase during this period; (2) a review of typical mistakes made by searchers in the public libraries; and (3) the selection of an appropriate format for the project's final monograph. This report offers data concerning the frequency of searches, cost information, and a list of errors made by searchers. The appendixes summarize the results of visits to participating public libraries, and provide a list of questions which will be answered in the final monograph. (EMH)

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Sixth Progress Report
January 1976 – March 1976

LMSC-D502175 15 April 1976

Investigation of the Public Library as a Linking Agent to Major Scientific, Educational, Social, and Environmental Data Bases

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IR 003 320

SUMMARY

A large increase in search activity was experienced by the CIN libraries in March (a total of 124 searches was performed). On the other hand, except for the Minneapolis Public Library, the new libraries passing the full cost of search on to their patrons show a very low level of search activity. A site visit by Applied Communication Research to these libaries is reported in Appendix A.

A complete review of searches was made during this quarter to determine the types of error by public library searchers. The results of this review were distributed to the participants in the form of DIALIB Notes, and these are summarized in Section 3.

An outline of the final report monograph has been prepared (Appendix B), along with a list of questions pertinent to the study (Appendix C). An Oversight Committee meeting to review a first draft of the monograph will be held in June. Summary comments for inclusion in the monograph have been solicited from the participants in the study.

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Section 1
EVALUATION

The main evaluation activity was a site visit by Dr. Alice Ahlgren of ACR to the four new libraries. Her trip report is given in Appendix A. At the present time, not enough questionnaires have been returned from the new libraries to allow any generalizations to be made concerning the user reactions, characteristics, and other evaluation information.

The questionnaires and search histories for the CIN libraries continue to be analyzed, and will be reported on in the final report monograph.

1.1 UTILIZATION BY CIN LIBRARIES

As shown in Fig. 1, the number of searches performed by the CIN libraries showed a steep rise in March. This was partly due to increased usage of the system by college and university students at San Jose and Redwood City.

The libraries continue to vary considerably in online time per search. For example, in March, the time per search and the average search cost for each library is given below in Table 1.

Table 1
AVERAGE TIME AND COST OF SEARCHES

Library	Number of Custom Searches	Average Online Time Per Search (min)	Average Cost of Search (at 1/2 Normal Rate)
San Mateo County	6	24.2	$12.50
Redwood City	34	17.7	9.85
San Jose	57	10.30	4.74
Santa Clara County	18	14.6	28.14

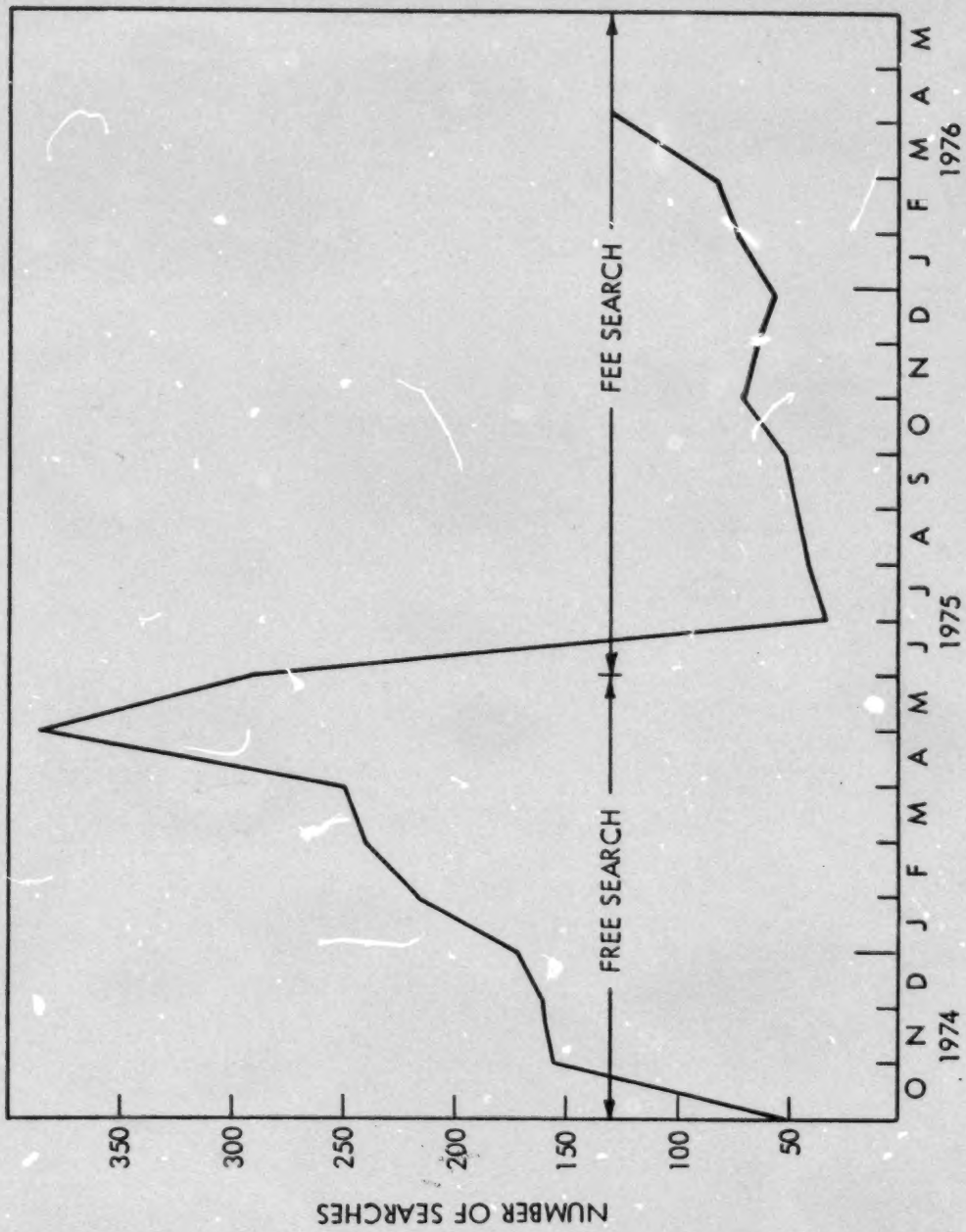

Fig. 1 Total Monthly Searches Performed by CIN Libraries

The differences reflect the type of data bases used, complexity of questions handled, and philosophy of reference searching. These topics will be dealt with in the evaluation portion of the final report monograph.

The number of custom searches continues to far exceed the number of standard searches; in March, 115 custom searches were performed compared to 9 standard searches. The main reason for this is the fact that many of the librarians can perform a search on several inexpensive data bases such as ERIC and NTIS at a cost close to the $5 flat fee charged for the standard search. Since the standard search is restricted to a single data base, it is advantageous for them to use the custom search. Another factor that will tend to decrease the use of standard search is DIALOG's improved 'Search Save' feature that enables the user to perform the same search on several data bases very efficiently (typically 2 to 3 minutes per data base).

1.2 NON-CIN LIBRARIES

At the request of the National Science Foundation, in the Fall of 1975, four additional libraries were invited to participate in the study. These were public libraries able to pass the full cost of search service on to the patron. The libraries were given free terminals and a pool of demonstration time for a 6-month period in return for evaluation of the impact of full-cost fees on search volume and the patron response. The libraries selected were:

- Minneapolis Public Library (INFORM), Minneapolis, Minn.
- Long Island Library Resources Council, Bellport, Long Island, N.Y.
- Houston Public Library, Houston, Texas
- Cleveland Public Library (Fact for a Fee), Cleveland, Ohio

The libraries were provided with terminals,* a block of free demonstration time, and free training. Their searches were reviewed and comments sent to the libraries when appropriate.

*Except for Long Island Library Resources Council.

1.2.1 Search Activity

The search activity for each of the libraries is shown in Table 2. It will be noted that Cleveland took 1 month to gain familiarity with the system before doing an actual search, while Minneapolis took 2 months, and Long Island 4 months. Houston has yet to perform an actual search for a fee. The search activity is quite low, with Minneapolis being the only library that has expended more than one-half hour of search time in a given month.

Table 2
SEARCH ACTIVITY OF NEW LIBRARIES

Month	Number of Searches			
	Minneapolis	Houston	Long Island	Cleveland
Sep 1975	√			
Oct 1975			√	
Nov 1975	8	√		
Dec 1975	11			
Jan 1976	1			√
Feb 1976	1		2	2
Mar 1976	20		1	2

√ Indicates first month in which terminal was used for demonstrations.

1.2.2 What This Portends

Pending a more complete evaluation by Applied Communications Research, we can only guess at the following contributing factors:

- Full Cost Fee. The most obvious factor is that the full-cost fee is just too high to allow significant volume to be generated by most libraries.

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- Publicity. The CIN libraries had 1 year of free service to publicize the availability of online search. This allowed a lot of word-of-mouth announcement of the service. In addition, the CIN libraries were concentrated in a small geographical area and thus the publicity can overflow from one library to another.
- Search Proficiency. The CIN librarians had a lot of practice during the first year of free service and were thus able to develop a fast search technique. This results in low fees to the patrons, and may thus generate more search activity. Another factor may be the lack of confidence in the new libraries in their search proficiency; there may therefore be some reluctance to promote and publicize the system.
- Attitude Toward Fee-Based Service. As indicated in the ACR report in Appendix A, a negative attitude toward fee-based search may be one factor in Houston's non-use of the system. (They were also in the midst of a move to a new building.)

This experience with libraries charging full fee indicates that in the third year of full cost service the CIN libraries can expect a greatly reduced level of search activity.

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Section 2
PUBLICITY

As reported in the Fifth Quarterly report, 1000 letters were sent out to county and city offices and personnel in Santa Clara County, and to a selected professional community (ladera) in San Mateo County. We can now report that the response to this mailing was very low.

Posters with tear-off sheets were sent to the libraries in Santa Clara County for posting in local offices and government buildings, and a moderate response was obtained. Information was sent to those who filled out the tear-off sheet and some searches resulted from this.

Some local spot radio announcements concerning computerized search in the library will be broadcast in April and May. Production of a TV spot is still being considered, but there is the question as to whether the broad coverage provided will cause confusion due to the fact that the public will be contacting libraries in the East Bay or Marin who know nothing about the service provided in the Peninsula area.

Section 3
REVIEW OF SEARCHES

Although the libraries were offered free review of searches when the fee period began, few have taken advantage of this service. Because it was important for the final report monograph that an understanding be obtained of factors that might cause search failure, an exhaustive review of searches was made during this quarter. Statistics are insufficiently comprehensive to attach quantitative numbers to these factors, but they are listed below in order of importance.

(1) Failure to EXPAND. This is probably the major failing noted, and is particularly needed when author, report number, and patent number are being SELECTed. For example, EXPANDing RN=PB 236148/3SL will show that a dash is missing after the PB. EXPANDing of cited author's names is particularly required in SciSearch and Social SciSearch, since the author's individual references appear with the author name as in FRIEDMAN, M., 1968, Vol 28, p. 1.

(2) Too Narrow a Search. This type of failure often occurs in fulltext search when the searcher specifies, for example, ORTHOMOLECULAR(W) VITAMIN(W)THERAPY, and abandons the search when no citations are found. Instead, the searcher should combine separately ORTHOMOLECULAR AND the set obtained for VITAMIN(W)THERAPY. Another example is SMALL(W)BOAT(W)DAVIT, without subsequent broadening to BOAT(W)DAVIT or even DAVIT.

(3) Nonoptimal Use of Data Bases. The librarians did not always choose the data base most appropriate to the subject areas. For example, Psych Abstracts contains material relevant to management science, NAL/CAIN contains material on food additives and the effects of pesticides, INSPEC Computers and Control contains material on hospital automation and library automation, but these were not chosen by the searcher.

(4) Failure to Type Out Citations. Often the correct search terms can be found by typing out a citation that satisfies a broader search. For example, a search of Psych Abstracts for MACH(W)SCORE, MACH(W)SCORES, and MACH(W)TEST got zero citation, and the searcher abandoned the search. Instead, a SELECT on the term MACH should have been made and several citations should have been typed out. It would have revealed the term MACH IV SCALE in these abstracts, and a search on MACH(2W)SCALE would have given 25 such citations.

(5) Failure to Use Full Text. In some data bases it is necessary to use full text for terms that one might expect to find indexed but are not. For example, a search of Chem Abstracts for FERRATE II, FERRIC III, IRON II, and IRON III all give zero citations. A full text search on FERRATE(W)II, etc. is required to obtain the required citations.

(6) The Use of the Wrong Term. If a librarian is doing a highly technical search and does not know the vocabulary, then search errors can be made due to incorrect terms. For example, a search was made on COMPUTER THROUGHCUT, instead of COMPUTER THROUGHPUT, and a search was made on STRATIFIED CHARGED instead of STRATIFIED CHARGE engines. Having the patron attend the session can avoid this type of error.

The review of searches indicates that it is important for the searcher to be critiqued to avoid bad search habit patterns and to learn about techniques that should have been used. This type of review can be provided within the public library if reference libraries mutually review their searches; time and budget should be made available for this purpose to enhance the capabilities of the staff.

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Section 4
FINAL REPORT MONOGRAPH

The outline of the final report monograph was distributed to the Oversight Committee and participating libraries for comment, as given in Appendix B. The report will have three main chapters (1) Description of the Study, (2) Evaluation, and (3) Guidelines and Recommendations. The appendix will contain statements concerning the experiment by participants and by the Oversight Committee.

A meeting of the Oversight Committee will be held on June 3, 1976, to review a first draft of the monograph. A subsequent draft, based on these discussions, will be distributed to participants for review.

Section 5
PUELICATIONS

"On-line Reference Retrieval in a Public Library," R. K. Summit and O. Firschein, Special Libraries, February 1976, pp. 91–96

"The Cost of On-line Bibliographic Searching," M. D. Cooper, N. A. DeWath, ACR-003-75-01, Applied Communication Research, December 1975, (to be published in a revised form in Journal of Library Automation, September 1976)

"Effects of Fee for Online Reference Retrieval in a Public Libary Setting," O. Firschein, and R. K. Summit (accepted for presentation at the 67th Annual Special Libraries Association meeting in June 1976)

Appendix A

SITE VISIT OF DR. ALICE AHLGREN, ACR, TO NEW LIBRARIES

During February, each of the four libraries being added to the project were site-visited. The purposes of the site-visits were principally to arrange for data collection forms and secondly to obtain information about library operations. Brief descriptions of each of these libraries follow.

HOUSTON PUBLIC LIBRARY

The Houston Public Library serves the metropolitan Houston area and includes 25 branches. A fee-based reference service, called Business Information Service (BIS), has been in existence at the library for about one year prior to the introduction of DIALOG. BIS charges patrons $15 per hour. However, patrons do not have to go through BIS to obtain a DIALOG search. Those patrons who have searches done independently of BIS are charged only for connect time and for off-line prints. No charges are made for staff time. Currently, the reference department at the Houston Public Library handles about 21,000 reference requests per week. DIALOG requests are a small portion of this work load.

Although DIALOG service has been in operation in Houston for several months, very few requests for the service have been received. The main patrons of the service are special libraries. The principal reason for the lack of use of the service is probably due to the fact that no publicity has been undertaken. In fact, the only current publicity source is word-of-mouth. The library does have plans to publicize the service.

One of the difficulties in publicizing the service, however, is the attitude of the staff at Houston towards fee-based services. Presently,

the staff is in the process of re-evaluating the entire fee-for-service rationale. There is a great deal of concern among staff members about the image of the public library and how it will be affected by fee-based services. In fact, there is strong reluctance towards charging for services at all. In keeping with this philosophy, DIALOG requests are not funneled through BIS unless there is a time factor involved, i.e. rush jobs go through BIS.

The Houston Public Library staff does feel that DIALOG service could be useful to the population the library serves. They hope, therefore, to continue the service and have already submitted a budget request for a terminal for next year.

LONG ISLAND LIBRARY RESOURCES COUNCIL

The Long Island Library Resources Council (LILRC) is one of nine regional corporations established by the New York State Commissioner of Education. The Council consists of a group of library systems, institutions of higher education, libraries, and other non-profit educational institutions.

The Cooperative Information Services Committee (CISCO) of the LILRC organized and initiated DIALOG service. Project CISCO "is designed to provide or supplement access to machine-readable data bases which might otherwise be unavailable to Long Island's research community."

While members of the Council include a wide range of libraries, public libraries are particularly encouraged to join. Annual membership dues are $25 per year plus fees for interlibrary loan service. Public libraries, however, do not pay the interlibrary loan fees. Individual memberships in the Council were discontinued some time ago.

Impetus for the project was actually provided by the Brookhaven National Laboratory, which offered the use of one of its terminals to the Council. In January, 1976, two sessions were held to acquaint reference librarians in Nassau and Suffolk counties with DIALOG service. Most searches completed since that time have been requested by librarians who attended one of the sessions. The cost of a search includes on-line time plus an overhead fee of $20 per hour. The overhead fee is intended to cover all costs associated with the operation of the service. The terminal is provided by Brookhaven at no cost to LILRC. Publicity for the service has been limited to a brochure which was sent to all LILRC members in January.

One of the operating principles of the service is that the patron does not have to be present at the time of the search. Also, LILRC does not normally provide documents for the patron after completion of the search. Instead, patrons must go back to the library at which the search was requested to obtain documents. A member library can, however, then obtain documents through the Council by using the interlibrary loan procedures. Billing for the service is done directly by the individual responsible for conducting the search. Bills are sent on to the patron with the search results.

LILRC has one staff member responsible for conducting all searches. The Brookhaven terminal is available to the LILRC operator two mornings a week, although arrangements for other times are possible. The staff members does try to spend as little time on-line as possible, by doing a great deal of off-line search preparation.

The LILRC will recommend alternate search services to a patron, especially if the patron wishes to be present at the time of the search. Adelphi

University and the New York Institute of Technology will do searches for outsiders for a fee. In addition, the State University of New York will do searches for individuals on both BIOSIS and ERIC.

CLEVELAND PUBLIC LIBRARY

The Cleveland Public Library serves primarily the city of Cleveland, although persons from all Northeastern Ohio regularly use the facilities. The library houses 3,356,515 volumes and includes 17 subject departments. In addition to the central Main Library building, there are 35 branches located through Cleveland.

In September, 1975, the library intitiated "Facts for a Fee" - a fee-based reference service - in response to requests for information beyond the scope of library policy on free research and outside the geographical area of responsibility. Facts for a Fee is aimed mostly at business and industry. The service is available on a contractual basis at $25 per hour. There is a minimum charge of $25. The staff includes three part-time individuals. Publicity for the service has consisted mainly of brochures which were sent out to large companies in Northeastern Ohio.

Reference service requests are screened by an office at the Main Library. Those requests which exceed the 15 minute time limit imposed on such requests by the library are referred to Facts for a Fee. Individuals making such requests receive a brochure from the library explaining the fee-based service. In addition, individuals coming to Facts for a Fee are given some evaluation by staff members of whether or not it is profitable to have them conduct a reference search. Alternate suggestions are provided if the service is not considered to be profitable to the patron.

DIALOG searches are offered through Facts for a Fee. Charges for the service include the cost of the data base(s) used, the Facts for a Fee charge of $25 per hour, a communications charge of $10 per hour, and offline printing and photocopying charges where desired. There has been no publicity on the DIALOG aspect of the service to date. However, a DIALOG brochure is available for distribution and a news release about DIALOG is being prepared for the Greater Cleveland Growth Association Newsletter.

One staff member is responsible for conducting all DIALOG searches. This DIALOG operator received a one-day training course from a Lockheed representative. Eventually the library would like to train other librarians to conduct searches. Until this is possible, however, reference librarians in special departments are consulted when necessary on search topics.

MINNEAPOLIS PUBLIC LIBRARY

DIALOG service at Minneapolis is operated through INFORM, a fee-based research service of the Minneapolis Public Library and Information Center whose purpose is to provide information on demand and in a useable form. The INFORM staff consists of one full-time librarian, one part-time librarian, and one clerical person. Charges for the service include $25 per hour for professional time, $10 per hour for extensive clerical tasks which require little or no professional time, and charges for photocopying, long distance calls and any other expenditures made on behalf of the client. The minimum charge for a new client is $25. Clients are asked to present a letter of intent or sign a simple contract stipulating the search topic, any limitations on the searching time, and when the information is to be presented. All search questions and clients' names

are kept confidential. Since 1970, INFORM has handled about 600 information searches annually.

INFORM added DIALOG service in September, 1975. Publicity for DIALOG consisted principally of one article carried in the Minneapolis Tribune in September, 1975. Some advertising is also done in local and regional periodicals. However, word-of-mouth is responsible for most searches.

DIALOG searches are conducted as an integral part of the general INFORM service. Thus, searches are usually initiated by the INFORM staff rather than as a result of a direct request from a client. INFORM staff have estimated that DIALOG can provide answers for between one-third and one-half of the inquiries received. One of the main concerns, however, is whether or not the computer search will be complete, quick and less expensive than the manual method.

DATA COLLECTION FORMS

Data collection forms for each of the libraries follow. Houston and Long Island use search request forms similar to those used by the libraries in California. Cleveland uses two different types of search request forms, one for individuals and one for business and industry. The individual search request form is nearly identical to the one used in California. The business search request form is similar to the one used at the Minneapolis Public Library. One of the major concerns in designing forms for use by business was the policy of the Minneapolis Public Library to protect the anonymity of business patrons.

Search Number_____ Client ID Number_____

Type of Firm_____
(i.e., attorneys, manufacturing, advertising, etc.)

Level of administrative responsibility of client_____
(i.e., manager, secretary, librarian)

If the end-user of the requested information is not the same individual who places the search request with INFORM, please also indicate the occupation of the end-user:

Occupation of end-user of information_____

Frequency as INFORM client:

____First Time ____Weekly ____Monthly ____Several Times a Year

How did the client hear about the availability of INFORM service?_____

_____

Date INFORM search initiated_____

Date DIALOG used_____

Date INFORM search concluded_____
(including retrieval of documents)

DIALOG Information Files Used in Search: (Check all data bases used)

____ERIC ____ABI ____INSPEC ____NAL/CAIN ____AIM/ARM

____Psych. Abs. ____Chem. Abs. ____Eng. Index ____Bio. Abs. ____NTIS

____Soc. Sci. ____COMPENDIX ____CMA/EMA ____Other(specify)_____

Logon Time_____Logoff Time_____

Headings and Sources Searched Prior to DIALOG:

_____

_____

_____

Headings and Sources Searched After DIALOG: (indicate headings specifically suggested by DIALOG)

_____

_____

_____

_____

Number of documents sought from citations_____

Number of documents actually obtained_____

Source of documents (indicate all sources used):

_____Minneapolis Public Library _____Special Library in Twin Cities

_____University of Minnesota _____Special Library Not in Twin Cities

_____Other (please specify)_____

Explanation of Search:

Why was a base chosen or not chosen_____

_____

_____

_____

Access in MPL to paper index same as DIALOG? _____Yes _____No

Was additional paper index in same base needed after DIALOG? ____Yes ____No

Format Chosen: _____Abstracts _____Citations _____Other

Search Overview:

Was INFORM search able to answer the question to client's satisfaction?

_____

_____

Was DIALOG a major or minor part?_____

_____

_____

If the DIALOG search was run against a manual search, evaluate time and results:

_____

_____

_____

_____

_____

Total Cost of INFORM Search to Client_____

PROJECT CISCO
LONG ISLAND LIBRARY RESOURCES COUNCIL
BOX 31 BELLPORT, NY 11713
PHONE: (516) 286-0400

SEARCH # _____

LITERATURE SEARCH REQUEST FORM

DATE OF REQUEST _____

PLEASE TYPE OR PRINT CLEARLY

DATE RESULTS NEEDED _____

Name _____

Home Address _____ Home Phone _____

_____

Business Address _____ Business Phone _____

_____ Bill to: Home ____ Business __

Occupation _____ Level of Education _____

Originating Library _____ Originating Librarian _____

---

1. Search topic. Please record, in your own words, a full description of the subject on which you are seeking information. Be as specific as possible

_____

_____

_____

2. List important terms (words and phrases) and any synonyms or related terms that you wish to include or exclude. Indicate both scientific and common terms; feel free to explain terms and be as detailed as necessary.

_____

_____

_____

3. List names of any people you know to be publishing work relevant to your question.

_____

4. Language restrictions: None ____ English only ____ English and ___

5. Depth of search. Are you looking for (check one)

____ All possible relevant citations ____A few relevant citations only

Please estimate how many this will be ____

6. Indicate maximum number of printed citations wanted (usually 5-10¢ each)
If left blank, a maximum of 50 is sent. ____50 ____100 ____(specify)

7. Information files. Please check those data bases you feel would be most helpful in locating information on your search topic. Next to files checked indicate earliest year to be included in the search. If no time limitation, write "All."

____ERIC ____ABI/INFORM ____ENGIN. IND. ____NTIS

____PSYCH ABS ____NAL/CAIN ____CHEM ABS ____SCISEARCH

____SOCSCICIT ____PREDICASTS ____BIOSIS ____PHYS ABS

____OTHER(S) - Specify

8. Reason for search (check one):

____JOB ____RESEARCH PAPER ____Other (Please specify)

____SCHOOL ASSIGNMENT ____PERSONAL INTEREST ____

9. How did you hear of the availability of the search service?

____LIBRARIAN ____NEWSPAPER ____Other (Please specify)

____NOTICE IN LIBRARY ____FRIEND (Name)

- -

REQUESTOR AGREEMENT:
I understand the charges for this search are based on the cost of the data bases(s) used, communications charge of $10/hr, CISCO charge of $20/hr and offline printing where desired. I agree to pay the search charges (not to exceed _____).

_____
SIGNATURE

FOR SEARCHER USE ONLY

1. Search conducted by _____ At _____

2. Date _____ Logon time _____ Logoff time _____

3. Offline preparation time _____

4. Information files used in search:

5. Client availability (check one):

____Client present at time of search ____Client available by phone at time of search

____Client not available at time of search

6. Numberof prints ordered _____ Date prints received _____

7. Cost of search to library patron
#Minutes Data Base Tymshare CISCO Prints

8. Billed date _____ Amount _____

Payment received _____

DIALOG EVALUATION - CLEVELAND PUBLIC LIBRARY

Deadline_____ Search Request No._____

This library is participating in a study, sponsored by the National Science Foundation, of public use of online retrieval terminals in public libraries.

To determine the usefulness of the DIALOG system, both to the librarian and to library patrons, we would appreciate it if you would provide us with the information requested on this form. All information will remain confidential and will be used only for evaluation purposes. For a successful evaluation, it is important to have access to as many patrons as possible. However, we understand that some users may prefer to remain anonymous. If you do not wish to have your name used, please check the box at the bottom of the page and the librarian will block out your name before releasing this form to the evaluation consultants.

Thank you for your cooperation in making this a successful study.

NAME_____ DATE_____

HOME PHONE_____ BUSINESS PHONE_____

HOME ADDRESS_____

BUSINESS ADDRESS_____

OCCUPATION_____ LEVEL OF EDUCATION_____

1. Search Topic - Please record, in your own words, a full description of the subject on which you are seeking information. Be as specific as possible.

2. List important terms (words and phrases) and any synonyms or related terms that you wish to include or exclude. Include both scientific and common terms. Please feel free to explain terms and to be as detailed as necessary.

TERM	SYNONYMS	EXCLUDED USES

27

I do not wish to have my name released. ☐

3. List specific references or names of any people that you know to be publishing work relevant to your question.

4. Language restrictions: None____ English only____ English and_____

5. List years relevant to your search_____

6. Information Files - Please list those information files that you feel would be most helpful in locating information on your search topic.

7. Reason for Search (check one):

____Job ____Research Paper ____Personal Interest ____Other(specify)_____

8. How did you hear about the availability of DIALOG service?

____Librarian ____Mailed notice ____Friend(name)_____

____Notice in library ____Newspaper ____Other(specify)_____

9. To aid in this evaluation, would you be willing to be contacted to provide some brief follow-up information on your satisfaction with the results of your search (check one)? ____Yes ____No

Thank you for your assistance.

****

SEARCH DATA - TO BE FILLED OUT BY PERSON CONDUCTING SEARCH.

1. Person Conducting Search_____

2. Date_____Logon Time_____Logoff Time_____

3. Off-line Search Preparation Time_____

4. Information Files Used in Search: (List all data bases used. Please place an asterisk next to any data base which was searched but did not provide citations.)

5. Person Doing Search (check one):

____Librarian ____Client(alone) ____Client(with librarian assistance)

6. Client Availability At Time of Search (check one):

____Client Present ____Client Available by Phone ____Client Not Available

7. Were the search results (check one):

____Picked up at main library ____Picked up at branch library ____Mailed to client

8. Number of off-line prints ordered_____Date prints received_____

9. Cost of Search to Library Patron_____

DIALOG EVALUATION - CLEVELAND PUBLIC LIBRARY

Search Number _____

Type of Firm _____

Level of administrative responsibility of client _____
(i.e., manager, secretary, librarian)

If the end-user of the requested information is not the same individual who places the search request, please also indicate the occupation of the end-user: _____

_____

Frequency as client:

____First Time ____Weekly ____Monthly ____Several Times a Year

How did the client hear about the availability of the service? _____

_____

Date search initiated _____

Date DIALOG used _____

Date search concluded (including retrieval of documents) _____

DIALOG Information Files Used in Search:

Logon Time _____ Logoff Time _____

Headings and Sources Searched Prior to DIALOG:

_____

_____

_____

_____

Headings and Sources Searched After DIALOG: (indicate headings specifically suggested by DIALOG)

_____

_____

_____

_____

Number of documents sought from citations_____

Number of documents actually obtained_____

Source of documents (indicate all sources used):

_____Cleveland Public Library _____Special Library

_____Local Universities _____Other (please specify)_____

Explanation of Search:

Why was a base chosen or not chosen_____

_____

Access in CPL to paper index same as DIALOG? ____Yes ____No

Access in area to paper index same as DIALOG? ____Yes ____No

Was additional paper index in same base needed after DIALOG? ____Yes ____No

Why?_____

Format Chosen: ____Abstracts ____Citations ____Other

Search Overview:

Was search able to answer the question to client's satisfaction?

_____

_____

Was DIALOG a major or minor part?_____

_____

_____

If the DIALOG search was run against a manual search, evaluate time and results:

_____

_____

_____

_____

_____

Total Cost of Search to Client_____

30

DIALOG SEARCH REQUEST - HOUSTON PUBLIC LIBRARY

Search Request Number _____ Originating Librarian _____

Search Deadline _____

The Houston Public Library is participating in a study, sponsored by the National Science Foundation, of public use of on-line retrieval terminals in public libraries.

To determine the usefulness of the DIALOG system, both to the librarian and to library patrons, we would appreciate it if you would provide us with the information requested on this form. All information will remain confidential and will be used only for evaluation purposes. For a successful evaluation, it is important to have access to as many patrons as possible. However, we understand that some users may prefer to remain anonymous. If you do not wish to have your name used, please check the box at the bottom of the page and the librarian will block out your name before releasing this form to the evaluation consultants.

Thank you for your cooperation in making this a successful study.

NAME _____ DATE _____

HOME/BUSINESS ADDRESS _____ HOME/BUSINESS PHONE _____

BUSINESS NAME _____

OCCUPATION _____ LEVEL OF EDUCATION _____

1. Search Topic - Please record, in your own words, a full description of the subject on which you are seeking information. Be as specific as possible.

2. Based upon the topic, the search objective is to:

3. List important terms (words and phrases) and any synonyms or related terms that you wish to include or exclude. Include both scientific and common terms. Please feel free to explain terms and to be as detailed as necessary.

TERM	SYNONYMS	EXCLUDED USES

4. List journals and/or authors that are most likely to produce good results.

I do not wish to have my name released. ☐

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5. English language only? Yes_____ No_____ Other languages_____

6. Depth of Search - Are you looking for (check one):

_____All possible relevant citations _____A few relevant citations only

7. I would like output to be (check one):

_____Citations _____Citation and abstracts (if abstracts available in data base(s) accessed)

8. Information Files - Please check those information files that you feel would be most helpful in locating information on your search topic. Also, PLEASE WRITE NEXT TO THE FILES CHECKED THE MAXIMUM YEAR TO GO BACK TO FOR THE SEARCH.

____ERIC ____ABI ____INSPEC ____NAL/CAIN ____AIM/ARM

____Psych. Abs. ____Chem Abs. ____CMA/EMA ____NTIS ____BIOSIS Prev.

____Soc. Sci. Cit. ____COMPENDEX ____Predicasts ____Other(specify)_____

9. Reason for search (check one):

_____Job _____Research Paper _____Personal Interest

_____School Assignment _____Other (please specify)_____

10. Was search suggested by (check one):

_____Librarian _____Client

11. How did you hear about the availability of DIALOG service?

_____Librarian _____Mailed notice _____Friend(name)_____

_____Notice in library _____Newspaper _____Other(specify)_____

12. To aid in this evaluation, would you be willing to be contacted to provide some brief follow-up information on your satisfaction with the results of your search? (check one) _____Yes _____No

Thank you for your assistance.

SEARCH DATA - To be filled out by person conducting search.

---

1. Person conducting search_____

2. Date_____Logon Time_____Logoff Time_____

3. Off-line search preparation time_____

4. Information files used in search: (check all data bases used - Please place an asterisk next to any data base which was searched but did not provide citations.)

____ERIC ____ABI ____INSPEC ____NAL/CAIN ____AIM/ARM

____Psych. Abs. ____Chem Abs. ____CMA/EMA ____NTIS ____BIOSIS Prev.

____Soc. Sci. Cit. ____COMPENDEX ____Predicasts ____Other(specify)_____

5. Client availability at time of search (check one):

____Client present ____Client available by phone ____Client not available

6. Were the search results (check one):

____Picked up at library ____Mailed to client

7. Number of prints ordered_____Date prints received_____

8. Cost of search to library patron_____

9. Comments:

Appendix B

OUTLINE OF FINAL REPORT MONOGRAPH

EXECUTIVE SUMMARY

PART 1: DESCRIPTION OF THE STUDY

1.1 Goals of the Study

(To investigate the role of the Public Library as a linking agent between the public and the many machine-readable data bases. To determine the impact on the public and on the library; to establish guidelines for libraries considering online retrieval.)

1.2 Structure of the Study

1.2.1 Organizations

- Lockheed Information Systems provides DIALOG service and project management
- Applied Communication Research provides the evaluation
- Participating CIN libraries (San Jose, Redwood City, Santa Clara County, San Mateo County) provide reference librarians and patron contact point
- Additional libraries – Houston, Minneapolis, Cleveland, and Long Island Library Resources Council – provide 6-month test of full-fee charge to patron
- Oversight Committee advises on project

1.2.2 Design of the Study

(One-year free service and one-year one-half cost service, plus terminals and training to CIN libraries. Six-month terminals and training only to other libraries. CIN libraries to be provided with two free terminals for the third year.)

LOCKHEED PALO ALTO RESEARCH LABORATORY
LOCKHEED MISSILES & SPACE COMPANY, INC.
A SUBSIDIARY OF LOCKHEED AIRCRAFT CORPORATION

1.3 Training and Tutorial

Training provided: 2-day DIALOG standard training; attendance at Palo Alto Users' Meeting; selective attendance at data base meetings.

Search crituques and tutorial notes.

1.4 Publicity

Chronology of publicity efforts.

Types and examples of publicity generated (posters, flyers, newspaper publicity, demonstrations, etc.)

Effectiveness of various publicity media.

1.5 Terminals

The Termenet Terminal
Sound-proofing requirements
Line voltage variation problem at Redwood City
TWX terminal

PART 2: EVALUATION

2.1 Analysis of System Use

(ACR analysis of who the patrons were, patron satisfaction, utilization of the system in free and fee period, etc.)

2.2 Effect on the Library

(ACR interviews with librarians and library administrators concerning impact of computerized search as well as advantages and problems.)

2.3 Time Required for Search

(Summary of Cooper/Dewath study of online and offline time.)

PART 3: VARIOUS ASPECTS OF COMPUTERIZED SEARCH

3.1 Financial

Problem of overload in a free service setting.

Mechanics of fee services: forms used, fee collection, need for an indication of search cost after each search.

Pressures on the librarian in a fee for service environment.

Alternatives for charging, e.g., credit cards, accounts

3.2 Marketing and Publicity

Lessons learned about media to be used.

Publicity and tutorial tools needed.

3.3 Administrative Aspects

Staff time requirements (required for completing forms and keeping records, explaining DIALOG to patrons, training time, performing searches).

Source document fulfillment (many sources available in Bay area, may not be true elsewhere).

3.4 Maintaining Search Proficiency

Training requirements
Critiques and reviews of searches
Need for formalized practice and review sessions

PART 4: GUIDELINES AND RECOMMENDATIONS

4.1 Guidelines for Libraries Considering Online Search

Are there patrons who require in-depth search (college students, professionals, governmental people, etc.)?

Interest and enthusiasm and time on the part of the administration and the reference librarians.

Need to establish policies and procedures to handle workload.

Adequate budget for staff time, terminal, publicity, and search time.

Willingness to promote the service. Need for patience until system catches on.

Problem of central reference service obtaining questions from branches.

4.2 Recommendations for Future Study

Study of non-users of the reference services.

Study of the "turnaway" problem at the library desk.

Study of searcher behavior-analysis of learning patterns.

Diffusion of information – how do patrons find out about the system and how do they spread the word?

4.3 Summary and Conclusions

Results achieved. Evaluation and publicity products useable by other libraries.

APPENDIXES

A. Statements on impact on the library, perception of usefulness, advice to other libraries by
   - Library management and reference librarians
   - Members of the Oversight Committee

B. Examples of Evaluation Forms Used.

C. Publicity Material Used.

D. Annotated Bibliography.

Appendix C

INTERESTING QUESTIONS RELATED TO THE STUDY

QUESTIONS CONCERNING THE STUDY

Forrest Carhart has provided the following breakdown for analyzing the study:

- Feasibility
- Economic viability
- Utility to users
- Impact on the library
- Impact on the users
- Marketing variables

We have modified this breakdown slightly, and gathered together the various questions asked by the Oversight Committee over the course of the project, as well as the original set of questions in the proposal in order to stimulate thinking on the final monograph.

POLICY

- What does the DIALOG experiment portend for the future of the library? Is it just another item to fit into the traditional library package of services, or is it a significant new mode that may require fundamental changes and new approaches to library conceptualization and organization? (Rubenstein)
- What is the future role, organization, aspirations etc., of the public library versus the college and specialized library? (Rubenstein)

FEASIBILITY

- Under what circumstances is it appropriate for a public library branch or system to offer this type of service? (Bourns)

MARKETING VARIABLES

- What promotional techniques are required?
- What is the effect of price to user on demand for the system?

- What are the factors for successful marketing of such a system in a public library setting?

ECONOMIC VIABILITY

- Economic: Is there a rationale to support different fees for different types of users? (Geller, Ferguson)
- Economic: Are there any potential off-setting cost reductions caused by DIALOG, e.g., service subscriptions? (Geller)
- Economic: What are the implications for support of other types of reference/information services, given the fee-for-service example of DIALOG? (Geller)

UTILITY OF USERS

- What are the characteristics of the users?
- What are the user reactions to the system?
- What additional information resources do the users require?
- What data bases are most useful in a public library setting?
- What impact does the system have on the user?

IMPACT ON THE LIBRARY

- How much staff time is required?
- What training and proficiency maintenance effort is required?
- How does the online system effect other library services?
- Is there a problem in providing source documents?

GENERAL CONSIDERATION CONCERNING THE STUDY

- Anything special about the geographic area or participating libraries in this experiment? Would the results of this study have been any different if the project were run in Oregon, Nevada, Montana? (Bourne)

- Are the results of this project directly transferable to any other public library or public library system? (Bourne)
- Was there any special advantage to the end user to having this service provided from a building with the label "library." Was there any added value to the user that could not be obtained if the end user obtained the search service from a commercial search service located next door to the library? (What is the special advantage to the user to have this service available from the library instead of some other outlet?) To what extent did the users in this experiment actually realize any such extra advantages? (Bourne)
- If you were to start this exercise all over again, but perhaps in a different area, what would you do differently? (Bourne)
- Would all of your generalizations and conclusions apply if the search service were SDC of instead of Lockheed? (Bourne)

OPERATIONAL CONSIDERATIONS

- How many people actually ended up as the actual terminal operators at each facility? (Bourne)
- What were the interface mechanisms between the library system (and DIALOG) and the end user, and how did these work out? (Bourne)
- Any particular personnel problems? (Bourne)
- What was the degree of library coommitment and willingness to provide the necessary support (and subsidy) to these services? (Bourne)
- Should/could you have terminals at each branch? (Bourne)
- Is there some recommended equipment mix and communications arrangement for each installation? (Bourne)